

pelvic floor was such that it was impossible to reduce the uterus. As the result of the exposure and constant irritation the cervix was deeply congested and ulcerated. The question of treatment was a difficult one. It was impossible to keep the uterus in place by the use of tampons while the pregnancy continued. As the cervix was infected it was dangerous to bring on labor. If the uterus was to be entirely removed an abdominal section was inevitable and this might cause fatal peritonitis. The patient had a spontaneous abortion, but passed out of observation and her subsequent history is unknown. In a somewhat similar case the reviewer kept the patient in bed for two months before delivery, using antiseptic solutions upon the cervix and sterile dressings. In this way the infection and inflammation largely subsided and the patient passed through a spontaneous labor successfully. She was afterward subjected to operation.

GYNECOLOGY

UNDER THE CHARGE OF

JOHN G. CLARK, M.D.,

PROFESSOR OF GYNECOLOGY IN THE UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA,

AND

FRANK B. BLOCK, M.D.,

INSTRUCTOR IN GYNECOLOGY, MEDICAL SCHOOL, UNIVERSITY OF
PENNSYLVANIA, PHILADELPHIA.

Value of Smears in Diagnosis of Gonorrhea.—When dealing with inflammatory lesions of the lower genital tract it is advantageous to determine the type of infection present, but NORRIS and MICKELBERG (*Jour. Am. Med. Assn.*, 1921, lxxvi, 164) point out that during the acute stage of the gonococcal infection the diagnosis is generally made without difficulty, as the clinical signs are more or less significant; if doubt exists, film preparations can be depended on. During the chronic stage the clinical signs are less characteristic than during the acute stage and the examination of smears is also less satisfactory. The presence of gonococci can be demonstrated by film preparations from every case if a sufficient number of correctly performed examinations are made. A single negative smear examination is without significance. In such a case the chances of demonstrating gonococci are about three or five to one according to the skill of the examiner and even under the most favorable circumstances, positive film examinations can be obtained in only a relatively small proportion of cases. Unless safeguarded by the Gram stain, smear examinations are valueless and even with Gram's stain errors in diagnosis may occur since differences in the thickness of the preparations, slight overstaining or understaining, etc., may lead to extremely misleading results. Owing to the many difficulties surrounding this form of diagnosis, the authors believe that unless the test is performed by one experienced in the

work, its results are of no value and are often actually misleading. They believe that clinical evidence is of far greater value than staining methods, even when the latter are performed by an expert and from a practical standpoint all cases should be regarded as of gonococcal origin until proved otherwise.

Management of Cervical Stump.—BISSELL (*Surg., Gynec. and Obst.*, 1920, xxxi, 578) is firmly opposed to the common practice of anchoring the round and broad ligaments to the cervical stump in the performance of supravaginal hysterectomy, on the ground that such practice displaces the stump and does not hold it in its proper position as it is supposed to do. In the follow-up clinic of the Woman's Hospital he has examined 130 cases of supravaginal hysterectomy done without anchoring the round ligaments in the cervical stump. In 127 of these cases the cervix was in normal or practically normal position prior to operation, and in not a single instance was the cervix found prolapsed after operation. In 3 cases the cervix following operation was found prolapsed with considerable relaxation of the anterior vaginal wall. In each instance, however, the conditions existed prior to operation: two of these cases were operated upon a second time, the cervix in each instance was removed and the fascia of the anterior wall lapped. The results in these cases were successful while the third case is awaiting operation. Bissell believes, therefore, that the condition of the pelvic floor is of much more importance in maintaining the cervix in its proper position than the anchorage of the stump to the ligaments, which procedure tends to displace the stump forward.

Treatment of Fibroid Tumors.—The conscientious and thoughtful operator makes every effort to preserve the menstrual function of his patient when dealing with fibroid tumors of the uterus. VINEBERG (*Med. Rec.*, 1921, xcix, 91) insists upon the importance of preservation of the menstrual function, for the ovaries, to his mind, serve no useful purpose when the uterus has been removed or when the endometrium has been destroyed, so that menstruation is no longer possible. Some of the very worst cases of the artificial menopause syndrome have been witnessed in women who had their ovaries and their uterus *in situ*, but in whom a too energetic curettage had brought about a permanent cessation of menstruation. The same applies to instances when the uterus was removed and the ovaries left behind. There is to be observed at the present time a singular state of mind on the part of the medical men. They are all keenly alive to the importance of conserving the menstrual function in women. They hesitate, to their credit, to consign their patients to an operation which would destroy that function. Still they will refer, without a moment's hesitation, a patient with a bleeding fibroid of the uterus, to the roentgenologist or radiologist, who can only be successful in destroying that function and, in most instances, permanently. Every patient who consults the writer regarding a fibroid tumor causing symptoms is told that she may have her choice of treatment, either by operation or by roentgen ray or radium. He tells her, regardless of her age, that the one (operation) perhaps carries more risk with it than do the others, but that in his opinion it is a more certain, permanent cure. If she is under forty he tries to impress her

with the advantages, of which he is strongly convinced, of submitting to an operation, the endeavor of which would be to remove her tumor or tumors and preserve her menstrual function. In spite of our strongest determination and most painstaking efforts, it must be admitted cases will now and then be encountered in which it is not possible to save the uterus. What we must endeavor to do, then, is to save enough of the organ and endometrium to carry on the function of menstruation. Even should we be baffled in this, and the entire organ have to be sacrificed, the patient would in no wise be any worse off regarding her menstrual function than she would have been had she been successfully treated with roentgen ray or radium. On the contrary, the writer believes she would be better off, for her cure would be more certain and more complete.

Action of Emmenagogue Oils on the Uterus.—Some experiments which have been performed on the isolated human uterus by GUNN (*Jour. Pharm. and Exp. Ther.*, 1921, xvi, 485) to determine the action of emmenagogue oils agree with the results of other observers on the excised uterus of other mammalia. It would seem that the emmenagogue oils in very small amounts have no action at all on the uterus. In higher concentrations such as never could be reached in the blood without producing dangerous, probably fatal, poisoning, they inhibit the uterine movements. When abortion occurs after their use it is probably an indirect result of severe irritation and inflammation of the bowel and kidney. This may induce congestion and reflex movements of the uterus which may in some cases result in abortion. The absence of specific stimulant action of these oils on the uterus renders them all the more dangerous poisons, as, after their failure in ordinary doses, large doses are sometimes taken, resulting in frequent poisoning, in a large proportion of cases, without the production of abortion.

Gynecologic Backache.—A small volume might be written about backache if this symptom were studied exhaustively from every viewpoint, and a most interesting and instructive treatise it would be. Probably the longest chapter should be written by the orthopedist, but the gynecologist, neurologist and internist could contribute much interesting material, and so interdependent should these be that the authors would do well to consult each other freely in the preparation of their respective monographs. Some surprising observations made in the postoperative follow-up clinic at the Woman's Hospital in New York during the past few years led BULLARD (*New York Med. Jour.*, 1921, exiii, 142) to feel that an analytic study of backache would be interesting. As a result of such an investigation he found that in a series of 721 cases of backache studied, 85 per cent. were cured by an appropriate operation. About 15 per cent. of this series presenting one or more common gynecologic causes of backache were not relieved of the backache by anatomically satisfactory operations. Probably much more than 15 per cent. of the backache in females is not gynecological. This study suggests that 15 to 20 per cent. of all women with retroversion, prolapse, pelvic inflammation, obstetrical lacerations, or pelvic tumors, do not have backache. Closer coöperation with the orthopedist, internist and the neurologist should enable the gynecologist better to diagnose and treat backache in women.

Tuberculosis of the Kidney in Women.—The results of an analytic study of renal tuberculosis in women made by BRADY (*Bull. Johns Hopkins Hosp.*, 1921, xxxii, 13), of the Johns Hopkins Hospital, shows that in a series of 77 patients, 25, or 32 per cent., of the patients complained of hematuria, and in 8 of these it was the first symptom. Two patients first noticed general weakness, and in all the other cases dysuria and pyuria were the first evidences of kidney disease. The general physical examination showed pulmonary tuberculosis in 6 cases. Four of these patients had active, two inactive, pulmonary tuberculosis. One patient developed tuberculous peritonitis two years after the removal of a tuberculous kidney. In 4 cases only was a marked enlargement of the kidney noted, and in all these cases operation revealed that they were dealing with cases of tuberculous pyelonephrosis. The routine gynecologic pelvic examination showed the ureter to be thickened and tender in 23 cases. This nodular thickening, with tenderness of the portion of the ureter which can be felt on vaginal examination, has been of great help in promptly directing attention to the probability of tuberculosis in the urinary tract. In 5 cases surgical treatment was not advised and in 2 others was refused by the patient. Four of these women had tuberculosis of both kidneys, one with symptoms dating back eight years, the second two years, the third one year, and the fourth only eight months. One of these women died in three months, the second in six months, the third in one year, and the fourth left the hospital unimproved and has not been heard of since. One woman had a unilateral renal tuberculosis, with advanced pulmonary changes, and in her case operation was not advised; she also left the hospital unimproved and has since not been heard of. In the two operable cases in which surgical treatment was refused the patients died within one year after leaving the hospital. In 70 out of the 77 cases operations were performed. In 67 cases the kidney was removed and in 3 cases simple nephrotomies were done. The results obtained in these 3 cases are very discouraging. One woman died in three months, a second in two years, a third left the hospital unimproved and has not been heard of since. This means that 8, or 19.5 per cent., of the 42 women of whom the records are complete are now dead. These 8 patients lived, on an average, for three years after their operation. Two of the living patients are unimproved, one three, the other nine years after operation. Seven may be classed as greatly improved. These seven women are all able to carry on their daily occupations and complain of slight bladder symptoms. Twenty-five, or 59.5 per cent. of these women, whose present condition is known are entirely well, with an average of eleven years since their operation. In this series there is one woman operated on twenty-four years ago, another twenty-two years ago and two twenty years ago. These patients have been relieved of all their symptoms by operation and report themselves to be now in good general health. Brady has divided all the cases in which the final results are known into two classes, one formed by those women from whom only the kidney was removed and the other by those from whom as much of the ureter as possible was removed at the same time. After careful study, the writer has been unable to show that the removal of the ureter makes any difference in the ultimate results of the operation. Approximately 19 per cent. of both groups of patients are now dead, 5 per cent.

are unimproved and 76 per cent. are either greatly improved or well. This study, however, has shown that the postoperative sinuses of the patients on whom nephro-ureterectomies were performed healed in an average time of five months, whereas the women in whom the diseased ureters were left, drained for eleven months. From this it would appear that it is better to remove the ureter along with the kidney when the condition of the patient warrants prolonging the anesthetic the short time necessary for carrying out this procedure.

PATHOLOGY AND BACTERIOLOGY

UNDER THE CHARGE OF

OSKAR KLOTZ, M.D., C.M.,

DIRECTOR OF THE PATHOLOGICAL LABORATORIES, SAO PAULO, BRAZIL,

AND

DEWAYNE G. RICHEY, B.S., M.D.,

ASSISTANT PROFESSOR OF PATHOLOGY, UNIVERSITY OF PITTSBURGH, PITTSBURGH, PA.

Studies on Experimental Pneumonia.—The experimental study of lobar pneumonia has long been hampered by the difficulty surrounding the production of this disease in animals. The various attempts at introducing bacteria into the deeper air passages by insufflation and by injection in fluid suspension have resulted in bronchopneumonias. Even the highly artificial method of flooding the lung with a suspension of bacteria failed to produce the typical lobar pneumonia. Following a method used by Opie and others in unpublished experiments, BLAKE and CECIL (i, *Jour. Exper. Med.*, 1920, xxxi, 403) were able to produce typical lobar pneumonias in monkeys. The method was by inserting a dry, sterile needle into the trachea and injecting very small doses of living, virulent pneumococci. The organisms were always suspended in 1 c.c. of fluid. All the biological types of pneumococci were employed. The following is a brief summary of the results obtained with the different biological groups of pneumococci: Out of 31 monkeys injected with type i, 26 took lobar pneumonia. Out of 2 monkeys injected with type ii, 2 took lobar pneumonia. Out of 3 monkeys injected with type iii, 3 took lobar pneumonia. Out of 4 monkeys injected with type iv, 1 took lobar pneumonia. All monkeys injected with types ii, iii and iv recovered. Out of 6 monkeys exposed to contact infection only 1 developed lobar pneumonia. Inoculation of pneumococci into the nose and throat induced a carrier state but none of these animals contracted lobar pneumonia, nor did they develop any infection of the upper respiratory tract. Subcutaneous and intravenous injection of pneumococci did not produce lobar pneumonia. Invasion of the blood stream by pneumococci was demonstrated to be secondary to the infection of the lung. They have shown, therefore, that lobar pneumonia is bronchiogenic in origin. Pneumococci were isolated from the blood stream within six hours after the intratracheal